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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,275	03/25/2005	Hans-Juergen Oberle	081276-1063-00	2135

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EXAMINER

PILKINGTON, JAMES

ART UNIT PAPER NUMBER

3682

DATE MAILED: 07/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/529,275		OBERLE ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	James Pilkington		3682	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Objections*

1. Claims 19 and 21 are objected to because of the following informalities:

- Clm 19 is objected to because it is a duplicate clm, see clm 18
- Re clm 21, "fact" on line 3 should be - - face - -.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 7 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is unclear to the examiner, in both the specification and the claims, as to how the component (as claimed in clm 1) can be embodied as an elastic ring element and still perform the same function as intended in the specification and claim 1. How does a ring displace radially? A ring can only be compressed causing it to **expand** radial. Does the applicant mean that there are ring-segments (see Remarks pg 9 third paragraph), in other words the ring element is made

of multiple segments these segments being capable of radially displacing since they are not connected to each other?

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-28 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Clms 1 and 21 read "pre-stressed elastic element." It is unclear as to how or what is causing the elastic element to be pre-stressed. What is causing the elastic element to be pre-stressed, is there some compression or other force that is pre-stressing the element before it gets compressed?

Re clm 22, the phrase "saw-tooth-like" renders the claim indefinite because it is unclear as to how much like saw tooth the element needs to be to meet the limitations.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 21, 13, 18-20, 23, and 25-28, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Giandinoto et al, USP 3,848,477

Re clm 21, Giandinoto discloses a gear drive unit (Fig 1) with a(n):

- Gear housing (R4/R5)
- Shaft (10)
- Axial stopping face (24)
- Counter stopping face (30)
- Plane (@ character 24)
- Angle of inclination (see Figure 1)
- Component (26)
- The component (26) being displaced radially by a pre-stressed elastic element (36)
- The component (26) is embodied to be a 2-step wedge (Figs 3 and 4; C2-C3)

Re clm 13, the elastic element (36) is embodied to be one piece with the component (26) (Fig 2). Elastic element (36) is fixed to the component (26) via part 34 making the elastic element (36) and component (26) one part and according to Merriam-Webster's Collegiate Dictionary: 10<sup>th</sup> Edition the word one is defined as "being a single unit or thing."

Re clms 18, 19 and 20, the component (26) is embodied to be one piece with the one stopping faces (24,30), as a stopping element.

Re clm 23, the component (26) is embodied to be U-shaped (Figs 3 and 4; C2-C3) and surrounds a stopping sleeve (42).

Re clm 25, the shaft (10) features a fore part (22) and/or at least one collar (14), with which the shaft is supported on the gearing housing via the component.

Re clm 26, the shaft (10) features a worm toothing or thread toothing (R1), and engages in an inside thread (on R2).

Re clm 27, the component (26) can be displaced radially to the longitudinal axis by means of a pre-stressed elastic element (36).

Re clm 28, the elastic element (36) is supported on a covering (38) of the gear housing (R4/R5).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 5, 6, 8-12 and 14, as best understood, are rejected under 35 U.S.C. 103(a) as being anticipated by Giandinoto et al, USP 3,848,477 in view of Kurashita, USP 6,352,006.

Re clm 1, Giandinoto discloses a gear drive unit (Fig 1) with a(n):

- Gear housing (R4/R5)
- Shaft (10)
- Axial stopping face (24)
- Counter stopping face (30)
- Plane (@ character 24)
- Angle of inclination (see Figure 1 below)

Art Unit: 3682

- Component (26)
- A pre-stressed elastic element (36), wherein the elastic element (36) is embodied as an integral part of the component (26)

Giandinoto does not disclose the elastic element and the component being formed as a single part.

Kurashita teaches an element and the component being formed as a single part (component 91 is integrated as one piece with spring element 9) for the purpose of providing a return device that can effectively work when a great load is applied (C10/L4-14).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Giandinoto and provide for the element and the component to be formed as a single part for the purpose of providing a return device that can effectively work when a great load is applied.

Re clm 5, the component (26) is embodied to be one piece with the one stopping faces (24,30).

Re clm 6, the component (26) is embodied to be U-shaped (Figs 3 and 4; C2-C3) and surrounds a stopping sleeve (42).

Re clm 8, the component (26) is embodied to be a 2-step wedge (Figs 3 and 4; C2-C3).

Re clm 9, the shaft (10) features a fore part (22) and/or at least one collar (14).

Re clm 10, the shaft (10) features a worm toothing or thread toothing (R1), and engages in an inside thread (on R2).

Re clm 11, the component (26) can be displaced radially to the longitudinal axis by means of a pre-stressed elastic element (36).

Re clm 12, the elastic element (36) is supported on a covering (38) of the gear housing (R4/R5).

Re clm 14, the component (26) is embodied together with the elastic element (36) as a wedge-shaped wavy leaf spring.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Giandinoto et al '477 in view of Kurashita '006 and further in view of Gunner et al, EP0563410.

Re clms 2, Giandinoto in view of Kurashita discloses all of the claimed subject matter as described above.

Giandinoto in view of Kurashita does not disclose at least one of the stopping faces having a saw-tooth profile.

Gunner teaches at least one stopping face (41) having a saw-tooth profile (Fig 2) for the purpose of providing better interaction between surfaces and to reduce the wear between the wedge faces.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Giandinoto in view of Kurashita and provide a



stopping face with a saw-tooth profile, as taught by Gunner, for the purpose of providing better interaction between surfaces and reduce the wear between the wedge faces.

11. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giandinoto et al '477 in view of Kurashita '006 and further in view of Zoino, USP 4,212,379.

Re clms 3 and 4, Giandinoto in view of Kurashita discloses all of the claimed subject matter as described above.

Giandinoto in view of Kurashita does not disclose at least one of the stopping faces being embodied as cone-shaped and having stair step profile (clm 3) or annular stair steps (clm 4).

Zoino teaches at least one of the stopping faces (27) being embodied as cone-shaped and having stair steps (58) for the purpose of allowing a load (force) to be taken at a gradually increasing rate those preventing sudden shock or strain in the system (C1). It is to be noted that a conical clutch and the stopping system in the instant application both relay on friction as a means of varying an output force.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Giandinoto in view of Kurashita and provide at least one of the stopping faces being embodied as cone-shaped and having stair steps, as taught by Zoino, for the purpose of allowing a load (force) to be taken at a gradually increasing rate those preventing sudden shock or strain in the system.

Art Unit: 3682

12. Claims 15 -17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giandinoto et al '477 in view of Zoino, USP 4,212,379.

Re clms 15-17, Giandinoto discloses all of the claimed subject matter as described above.

Giandinoto does not disclose at least one of the stopping faces being embodied as cone-shaped and having stair step profile (clm 15) or annular stair steps (clm 16 and 17).

Zoino teaches at least one of the stopping faces (27) being embodied as cone-shaped and having stair steps (58) for the purpose of allowing a load (force) to be taken at a gradually increasing rate those preventing sudden shock or strain in the system (C1). It is to be noted that a conical clutch and the stopping system in the instant application both relay on friction as a means of varying an output force.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Giandinoto and provide at least one of the stopping faces being embodied as cone-shaped and having stair steps, as taught by Zoino, for the purpose of allowing a load (force) to be taken at a gradually increasing rate those preventing sudden shock or strain in the system.

13. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Giandinoto et al '477 in view of Gunner et al, EP0563410.

Re clms 22, Giandinoto discloses all of the claimed subject matter as described above.

Giandinoto does not disclose at least one of the stopping faces having a saw-tooth profile.

Gunner teaches at least one stopping face (41) having a saw-tooth profile (Fig 2) for the purpose of providing better interaction between surfaces and to reduce the wear between the wedge faces.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Giandinoto and provide a stopping face with a saw-tooth profile, as taught by Gunner, for the purpose of providing better interaction between surfaces and reduce the wear between the wedge faces.

### ***Response to Arguments***

14. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

15. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a wedge with two inclined stopping surfaces, which are at a distance from one another, so that the stopping face has a shoulder) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As currently claimed the applicant is only claiming a "2-step wedge" which is disclosed by Giandinoto. Giandinoto's 2-step wedge also comprises two inclined stopping surfaces (one on either side of shaft 42b), which are a distance from one

another, so that the stopping face has a shoulder (section of the wedge that connects the two stopping surface).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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7.19.2006



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